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# ASTONISHING DISCOVERIES ABOUT YOUR BLOOD

Professor Reichert's Experiments With Blood Crystals, Which Show the Orang-Outang Related to the White, the Gorilla to the Black, the Seal to the Bear, Seem to Prove Evolution, and May Revolutionize Murder Trials. THE CHARACTERISTIC CRYSTAL



OF THE WHITE MANS BLOOD



The corpuscies in human blood are of two blood of that color and others with chief kinds, the red and the white. The blood of other colors. red corpuscies are much more numerous. The "yellow streak," said to be prev-5,600,000 per cubic millimetre, or 400 to may have its origin in the spatzagus, a sea 500 red to each white corpuscie.

every school boy in preparing objects for in the horseshoe crab. study under the microscope will serve for Green, violet, purple, madder, mahogthe examination of blood crystals, but any, brown, indigo-blue and lilac blood Dr. Reichert, having evolved a theory have been found in the lower animals. entirely new, required the services of an It is possible that there will be less expert in the study of crystais under boasting of blue blood when it becomes the lens and associated Amos Peaslee common knowledge that blue blood has Brown, Ph. D., Professor of Mineralogy never been found in a vertebrate, aland Geology in the University of Penn- though it is common in loisters of the sylvania, with him in the work. This deep sea variety and in some crabs. particular and highly specialized work is It is an interesting fact that red blood THE CRYSTALS IN AN ORANG-

much of the work was done at tempera-ture at or near the freezing point. To hemoglobin were encased in the same accompilsh these marvelous results it was tissue.

the white, averaging in man slent in Mr. Jack Johnson by some critics, urchin with yellow blood, just as the blue The methods of preparing blood speci- blood of Mr. Anthony Drexel Biddle, who mens for study are many, and for general recently sparred three rounds with the purposes the proceeding practiced by colored champion, may have its origin

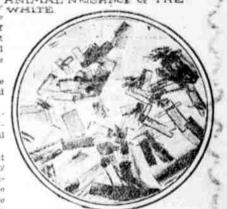
called crystallography, a science apart and blue blood are never present in the OUTANGS ELCOD, THE NEAREST from the special work of Dr. Reichert. same body. The blood of the scorplons is ANIMAL NEIGHBOR OF THE The extreme solubility of the specimen rich in hemocyanin, giving a rare bin compelled Dr. Relehert and Professor tipt to the blood, while the flies of the Brown to conduct their experiments dur- Diptera genus show the brilliant red of ing the cooler months of the year, and the hemoglobin. In no instance has it

> camera all prove that blue blood and red blood will not mix.

The Xiphosura, Decapeda and Stomstopoda have blue blood and the Ostracoda, the Copepada, the Cladocera and the Phyllopoda have good red blood. Dr. Reichert has discovered much that is useful in proving the evolutionary theories of Darwin and Hacckel. Nelther Darwin nor Haeckel could produce pictures and actual specimens under the

solve the mystery of life by connecting animal and plant life so closely that the actual relationship will be clear to all

Nearly forty years ago Haeckel wrote

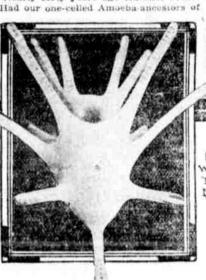


glass with which to demonstrate the close relationship between the lemur, the REGROS TYPICAL BLOOD monkey, the upe, the bancon, the ne-CRYSTALS NOTE THE CHARACTER





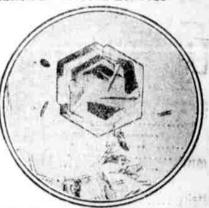
BLOOD CRYSTALS OF A GORILLA WHOSE CHARACTERISTICS SHOW NEIGHBOR TO THE BLACK



Concerning Whose Blood

Professor Reichert Made

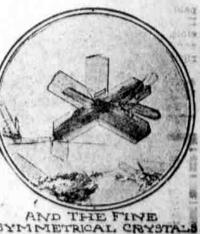
Some Strange Discoveries.



son first by line drawings made by their descendants would afterwards, in Charles Travis, Ph. D., of the Depart- the Cambrian Period, produce a many. THE BLOOD CRYSTALS OF TICE LEMUR. WHICH SHOW ment of Geology and Mineralogy, in the celled worm-like organism possessed of COMMON DESCENT OF



THE COARSE BLOOD CRYSTALS OF THE MULE.



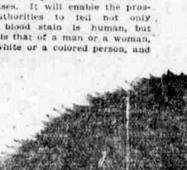
OF THE HORSE



nary of all in form.

tangular and slender, and those of the The new system of testing and preparerang-outang tend toward the same ing blood will be particularly useful in form. The crystals of the negro are criminal cases. It will enable the pros-comparatively short and thick, and ecuting authorities to tell not only these of the gorilla are remarkably so whether a blood stain is The relationship between closely allied whether it is that of a man or a woman, animals is always quickly seen. You can that of a white or a colored person, and tell at once from the blood, as prepared

from that of another.



Experimenting with the Blood of Two Hundred Animals at Once in the University of Pennsylvania. A South

American Monkey Whose Blood Crystals Present Many

exceedingly difficult, to develop them. and reproduced for study and compari- the Laurentian Period been told that Astonishing University of Pennsylvania, and then skin and intestine, muscles and nerves. Problems of made permanent by the use of the pho- kidneys and blood vessels, they certainly tomicroscope. Where difficulties arose would not have believed it: nor. again Evolution. from similarities of color screens were would these worms have believed, had

feets.

necessary to devise methods to control the rapidity of crystallization, and also to perfect methods that would not injurious-

ods developed by Dr. Reichert and Professor Brown that it was quite possible

for them to promote or retard crystalltzation at will. By promoting crystalli-

quantities of blood in which, on account of their rapid crystallizability, it has

heretofore been impossible, or at least

The specimens were "fixed" in gelatin

ly affect the hemoglobin molecules. To such perfection were these meth-

## Concerning Fools, Hearts and Women.

compare the disputed specimen. He will also be able to tell whether or not it is the man who does not stick his a "vagabond wandering up and down." theirs would acquire human form, and also be able to tell whether or not it is the field of the accused left in some tell—

Which is included in our modern We should distinguish a man who has as "deficient in humanity." Spinsters tree of knowledge. All these would have been discovered, and studied Sanskrit deeply from a man are likewise a nulsance. "Worry de-answered: "We shall never change, nor The microphotographs will show the some piquant renderings of the book's who is polite at table. Not as Sira. With parts from thy house when thou mar-shall we ever understand the history of blood grystals so clearly that the jury brighter side have been given by Dr. him it is only a difference of degree, riest thy daughter; but," he adds kind-our evolution."

will be able to understand at once the Cesterly, of England. The book was Perhaps he was right."

At any rate the people of to-day are points at issue and form an intelligent written two hundred years before Christ On what the lecturer describes as "the Sira, according to Dr. Oesterly, was beginning to understand the humble origin The demonstration of the doctrine of no more profound philosopher has lived the author of "Ecclesiasticus" had a dinner table, and presented his readers by his blood crystals the theory of marine evolution has hitherto depended largely since. Many of the more modern sapient great deal to say. Though a lover of with something like a complete guide origin. He has traced evolution every inch upon the peculiarities of structure as evi- sayings resemble. Sira's ideas very the sex he could not blind himself to to fashionable manners in Jerusalem. of the way through more than 2,800 speci-

om that of another. coloring matter in human blood "hemo- plant life. In a thousand courts eminent experts globin." They have a common origin. The flui

skin of animals. This method has led to much the same foundation. kin of animals. This method has hed to much the same foundation.

wamen.

great man open not thy mouth too He has traced life in every stage from nany errors, as proved by the remark- Gossips, gluttons, spinsters and mait
"Give me any wound but a heart wide, and say not, 'What a glorious the mollusk to man and in every case the

lated to the dogs, foxes and wolves. Dr. but the mouth of the wise is in their her appearance and blackens her face piece of advice suggesting to the doc- authority whence came a certain speciReichert has formd by the blood test that heart." wrote Sira, dividing as usual, all like that of a hear." the bear is more nearly related to the humanity into those who follow wisdom "A" malice is but little compared with goins on sometimes." seat, and has nothing in common with and those who follow footishness. Eru- a woman's mallee."

denced by the bones, the muscles and the much, but the philosophy of all ages has the fact that there are women and "When thou sittest at the table of a mens of life as shown in living things.

tion of one useful maxim.

the dog, fox or wolf. S dition, common sense, and good man- On the other hand, he exclaimed, where, meaning, "Eat not like 2 pig," indeance of Pr. Reichert's discoveries at Over one-twelfth of a living body is need he regarded merely as different with true poetle fervor. "Children and And he proceeds, "Be first to leave off, their full worth. Already from all parts blood. Nature provides blood or a fluid manifestations or degrees of human wis- the building of a city establish a man's for manners' sake, and he not a giveton of the world have come congratulations

away the carbonic acid gas generated by "For example," explains Dr. Oesterly, pearls."

"Hast thou heard anything? Let it die vestigation, in the everyday practice of the use of blood or its substitute.

"according to Sira, a man is 'wise' it For bachelors Sira hand a truly East- with thee. Be of good courage, it will medicine, these researches will have great

zation they obtained crystals from small The Odd Egg of the Sea Urchin,

used, giving sharp outlines to the sub- they been told that their descendants would develop into skulfless vertebrates. even to identify the blood of one man trees is called "chlorophyli," and the red the connecting link between animal and

The blood of all the vertebrates is red, such as the Amphloxus; nor would these
from that of another.

The blood of all the vertebrates is red, such as the Amphloxus; nor would these
from that of the lower animals is of animals have credited that their nosterity but that of the lower animals is of animals have credited that their posterity The fluid in which the blood crystals various colors. The blood of insects is would ever become skulled animals. Our have festified that no man'could tell the and their functions are the same. Dr. are found is called the plasma or liquor colorless.

Silurian primitive-fish ancestors would difference between two specimens of hu. Reichert has demonstrated that when the sanguinis. The fact that the white of an While it is true that no man has have been equally hard to convince that man blood. The fact that the white of an While it is true that no man has have been equally hard to convince that man blood. The fact that the white of an While it is true that no man has have been equally hard to convince that man blood. Now this will be quite pos- coloring matter has been removed from egg has been substituted for this liquid actually "blue blood," it can be shown their offspring of the Devonian Period this liquid actually "blue blood," it can be shown their offspring of the Devonian Period the Coloring matter has been removed from egg has been substituted for this liquid actually "blue blood," it can be shown their offspring of the Devonian Period the Devonian Period the Coloring matter has been removed from egg has been substituted for this liquid actually "blue blood," it can be shown their offspring of the Devonian Period the Coloring matter has been removed from egg has been substituted for this liquid actually "blue blood," it can be shown their offspring of the Devonian Period the Coloring matter has been removed from egg has been substituted for this liquid actually "blue blood," it can be shown their offspring of the Devonian Period the Coloring matter has been removed from egg has been substituted for this liquid actually "blue blood," it can be shown their offspring of the Devonian Period the Coloring matter has been removed from egg has been substituted for this liquid actually "blue blood," it can be shown their offspring the coloring matter has been removed from egg has been removed from e sible. The expert will be able to say that both' a yellowish liquid remains, which is indicates its rich albuminous qualities, that he had distant ancestors with would acquire amphibian form, and yet later, in the Triassic Period, would appear as mammals; the latter, again, would have deemed it impossible that, in Ter-

by the son of Sira, a Jerusalem Jew, and delicate and fascinating subject of ladles" particularly keen upon wisdom at the they came from. Dr. Reichert has proved

great man open not thy mouth too He has traced life in every stage from

"Stretch not out thy hand whither-The great wide circle called life has For instance, the old method of com- ation.

dragon than live with a mailclous seever thine eye goeth, and thrust not been narrowed and contracted by Dr. parison classed the bear as nearly re- "The heart of feels is in their mouth, woman. The mailce of a woman darkens thyself with it into the dish," was a Reichert until he is prepared to say with

Scientists bent upon solving the most "Eat like a man," says the sage else- obscure problems will grasp the sig-GROUND SQUIRDEL, WHICH similar to it to carry expent to every dom, which, in its turn, differed only in name; but woman's affection is above lest thou be despised."

CARRIES THE BULDONIC part of every living thing and to carry degree from divine wisdom.

PLACUE: "Hast thou heard anything? Let it die vertigation, in the everyday practice of "Hast thou heard anything? Let it die vertigation, in the everyday practice of "Hast thou heard anything? Let it die vertigation, in the everyday practice of "Hast thou heard anything?"

### a stain left on a weapon or a garment is or is not that of the murdered person. provided he has an unquestioned specimen of the victim's blood with which to

EDWARD TYSON

Reichert, of the Uni-

versity of Pennsylva-

nia, has invented a new

method whereby he classifies

crystals of 2,800 creatures,

taking their blood without

killing them, and has pre-

pared very interesting micro

photographs of all of

the lowest, including the crab.

by Dr. Reichert, that the domestic cat ts a close relation of the mountain lion. It very curious to note the relationship between the horse and the mule, the crystals of the latter being courser and much more irregular than those of the former. Many of the crystals have a very strange appearance as compared with man. The blood of the group equirrel, which has a hateful reputation

for conveying the bubonic plague in

THE BLOOD CRYSTALS WHICH PROVE THE SEAL

COUSIN TO THE BEAR,

the gurilla.

and identifies the blood crystals of every living animal He has examined the blood

AND THE BLOOD CRYSTYLL State place. OF THE BEAR.



able discoveries of Dr. Reichert. Some clous women are among the characters wound and any wickedness but a spread!" was the lecturer's transla- blood test proved only one thing-a comtheories advanced by zoologists recently prominent enough even in those remote woman's." have been confirmed by these discoveries, days for the philosopher's consider- "I would rather dwell with a lion or a For instance, the old method of com- atlon-

The green coloring matter found in he devotes his time to learning, but so ern contempt. The uninarried man is not burst thee."